

# What Is Claimed Is:

1. A system for delivering a plurality of video blocks to a user terminal serviced by a remote node comprising:

a broadband signal source for providing a broadband signal;

a first WDM having an input port and a plurality of output ports, wherein said broadband signal is forwarded to said input port of said first WDM and further wherein said first WDM separates said broadband signal into a plurality of optical bands output to said output ports of said first WDM;

a plurality of modulators, wherein each of said plurality of modulators modulate one of said optical bands with a composite signal representing data in a plurality of independent RF blocks to form a plurality of modulated signals;

a second WDM configured to receive said plurality of modulated signals, wherein said second WDM forms a combined broadcast signal for output on an output port of said second WDM;

a feeder fiber, wherein said remote node receives said combined broadcast signal via said feeder fiber;

a distribution fiber for distributing said combined broadcast signal user's site; and

further wherein a conventional satellite set-up box at said user's site selects a RF block.

2. The system according to claim 1, wherein said optical bands match a Free Spectral Range (FSR) of a Waveguide Grating Router (WGR) at said remote node.

3. The system according to claim 2, wherein an optical filter, nominally matched to one of said first WDM's optical bands at said user's site, is used to select a stack of RF blocks, wherein said stack of RF blocks represents one optical band of said plurality of optical bands.

4. The system according to claim 3, further comprising:

a block-converter for converting said stack of RF blocks; and

a bandpass filter for retrieving said selected RF block from said block-converted stack of RF blocks.

5. The system according to claim 4, further comprising a passive splitter to split said combined broadcast signal, wherein said split combined broadcast signal is introduced to said WGR on a plurality of said WGR's input ports.

6. The system according to claim 5, further comprising an optical amplifier, wherein said combined broadcast signal is optically amplified prior to being passively split.

7. The system according to claim 6, wherein said delivery of a plurality of video blocks is augmented to additionally include delivery of switched services by using an additional narrowband signal source to provide a narrowband signal and by using an additional coarse WDM (CWDM) to detect and select said switched services prior to introduction of said passively split combined broadcast signal to said WGR.

8. A system for delivering a plurality of video blocks to a user terminal serviced by a remote node comprising:

means for receiving, by a first WDM, a broadband signal from a broadband signal source;

means for separating, by said first WDM, said broadband signal into a plurality of optical bands;

means for modulating each of the plurality of optical bands with a composite signal representing data in a plurality of independent RF blocks to form a plurality of modulated signals;

means for forwarding said plurality of modulated signals to a second WDM to form a combined broadcast signal;

means for transmitting said combined broadcast signal over feeder fiber to a remote node;

means for further transmitting said combined broadcast signal over distribution fiber to a user's site; and

means for selecting a RF block for distribution over a distribution fiber to a conventional satellite set-up box at said user's site.

9. The system according to claim 8, wherein said optical bands match a Free Spectral Range (FSR) of a Waveguide Grating Router (WGR) at said remote node.

10. The system according to claim 9, wherein said means for forwarding further comprises a means for selecting a stack of RF blocks using an optical filter nominally matched to

one of said first WDM's optical bands at said user's site, wherein said stack of RF blocks represents one optical band of said plurality of optical bands.

11. The system according to claim 10, further comprising:
- means for block-converting said stack of RF blocks; and
- means for bandpass filtering said block-converted stack of RF blocks to retrieve said selected RF block.

12. The system according to claim 11, wherein said combined broadcast signal is passively split and introduced to said WGR on a plurality of said WGR's input ports.

13. The system according to claim 12, wherein said combined broadcast signal is optically amplified prior to being passively split.

14. The system according to claim 13, wherein said delivery of a plurality of video blocks is augmented to additionally include delivery of switched services by using an additional narrowband signal source to provide a narrowband signal and by using an additional coarse WDM (CWDM) to detect and select said switched services prior to introduction of said passively split combined broadcast signal to said WGR.

15. A system for delivering a plurality of video blocks to a user terminal service by a remote node comprising:

a plurality of broadband signal sources for providing a plurality of broadband signals, wherein each broadband signal is comprised of a plurality of optical bands;

a plurality of modulators, wherein each of said plurality of modulators impress one of said optical bands with a composite signal representing data in a plurality of independent RF blocks to form a plurality of modulated signals;

a device for combining to form a combined broadcast signal from said plurality of modulated signals;

a feeder fiber, wherein said remote node receives said combined broadcast signal via said feeder fiber;

a distribution fiber for distributing said combined broadcast signal to a user's site; and further wherein a conventional satellite set-up box selects a RF block.

16. The system according to claim 15, wherein said optical bands nominally match a Free Spectral range (FSR) of a Waveguide Grating Router (WGR) at said remote node.

17. The system according to claim 16, wherein an optical filter is used to select a stack of RF blocks.

18. The system according to claim 17, further comprising:

a block-converter for converting said stack of RF blocks; and

a bandpass filter for retrieving said selected RF blocks from said block-converted stack of RF blocks.

19. The system according to claim 18, further comprising a passive splitter to split said combined broadcast signal, wherein said split combined broadcast signal is introduced to said WGR on a plurality of said WGR's input ports, wherein said stack of RF blocks represents one optical band of said plurality of optical bands.

20. The system according to claim 19, further comprising an optical amplifier, wherein said combined broadcast signal is optically amplified prior to being passively split.

21. The system according to claim 20, wherein said delivery of a plurality of video blocks is augmented to additionally include delivery of switched services by using an additional narrowband signal source to provide a narrowband signal and by using a coarse WDM (CWDM) to detect and select said switched services prior to introduction of said passively split combined broadcast signal to said WGR.

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